						Brida	e Culve	ert Inspe	ection					
										CUL1				
Inspector Name	Year Built								•	1				
Located Over		Name	NORDE	 3G						Owen Salava				
Marker Body CL/Year Assistant Name	Located Over				165, WAT	ERCF	RS-ST	1						
	Located On		11:08 C1	9.547						DI OLO A				
	Water Body Cl./	Year						Assista	nt Class					
Legal Land Location NW SEC 32 TWP 40 RGE 11 W5M Data Entry By Marcia Chavez								Inspec	ion Date	06-Feb-2012				
Data Entry Date Q2-Mar-2012 Q2-Mar-201			NW SEC	32 TWP 40 F	RGE 11 W	/5M								
Reviewer Name John O'Brien	Longitude, Latitu	ude	-115:33:2	21, 52:29:36										
Contract Main. Area	Road Authority		Alberta T	ransportation	(AIT)			-						
ADDT/Year		Area	CMA18	·	,									
Road Classification RAU-213.4-120 Solow-Up By Solo	Clear Roadway/	/Skew	13.1 / -30	deg. (LHF)				Dept. Reviewer Name						
Detour Length (km) 80	AADT/Year		1,290 / 2	010 (A)				·						
String Culvert Information Sumber of Culverts 1							Follow-	Up By	2. 116/2012					
Number of Culverts								. ,						
			ation											
MAIN														
Special Features Special Features Comment Utilities (Located at)	Pipe #	Barrel	S	Span	Rise (or	Dia.)	Туре		Length	Corr. Profile		Shape		
Utility Attachments	1	MAIN	1	429	1575		SPE		69.5	152X51		ELLIPSE		
Utilities (Located at) Utility Attachments Felephone South side of road. Others 1 wire @ North r/w. Chers Approach Road / Embankment Horizontal Alignment 7 7 7 Curve to the East. Roadway Width (m) 13.100 Chers Act South. Cherical Alignment 5 5 5 Minor scour of sideslope @ D/S end, repaired with rock. At South. At South. Approach Road / Embankment Chertical Alignment 7 7 7 Curve to the East. Bottom of sag, limited sight distance. Chertical Alignment 8 5 5 South side only. Chertical Alignment 9 7 T Curve to the East. Course to the East. Course to the Sag. Course to the Sag. Curve to the Sag. Cu	Special Feature	S												
South side of road Gas Cower 1 wire @ North r/w. Municipal Problem (Y/N) No Cover North r/w. Municipal M	Special Feature	s Comi	ment											
South side of road Gas Cower 1 wire @ North r/w. Municipal Problem (Y/N) No Cover North r/w. Municipal M														
College						Uti	ilities (L	_ocated	at)					
December 1 wire @ North r/w. Decembers Problem (Y/N) No Approach Remarks Problem (Y/N) No								0						
Approach Road / Embankment College	-													
Approach Road / Embankment Last Now Explanation of Condition Vertical Alignment 7 7 Curve to the East. Roadway Width (m) 13.100 Embankment 5 5 5 Minor scour of sideslope @ D/S end, repaired with rock. Sideslope (_:1) 2.0 (Height of Cover(m): 7.3) Guardrail (Y/N) Yes South side only. Approach Road / Embankment General Rating 7 7 Upstream End Culvert Component Last Now Explanation of Condition Oriection N Ind Treatment (Concrete, Steel, NONE) Headwall X X X Wingwalls X X X Wingwalls X X X Wingwalls X X X Embankment 5 5 5 Minor scour of sideslope @ D/S end, repaired with rock. At South. End Treatment of Condition South side only.		1 Wire	e @ North	r/W.										
Approach Road / Embankment Last Now Explanation of Condition Horizontal Alignment 7 7 Curve to the East. Bottom of sag, limited sight distance. Embankment 5 5 5 Minor scour of sideslope @ D/S end, repaired with rock. At South. Embankment 5 5 5 South side only. Embankment 5 5 5 South side only. Embankment 6 South								Problei	TI (Y/IN) INO					
Clast Now Explanation of Condition	Remarks				۸۰	anroa	ch Pos	l / Emb	ankmont					
Horizontal Alignment Foreitical Alignment Foreitica										tion				
South side only South side	Horizontal Alignment					Curve to the East.								
Roadway Width (m) 13.100 Embankment 5 5 5 Minor scour of sideslope @ D/S end, repaired with rock. At South. At South. Guardrail (Y/N) Yes South side only. Upstream End Culvert Component I Last Now End Treatment (Concrete, Steel, Others, None) Headwall X X Wingwalls (Shape:)	Vertical Alignment					Bottom of sag, limited sight distance.								
Sideslope (_:1)														
Sideslope (_:1)	Embankment					5	5	Minor s	cour of sideslo	pe @ D/S end. ı	repaired with re	ock.		
Height of Cover(m): 7.3) Guardrail (Y/N) Yes South side only. Upstream End Culvert Component Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X X Wingwalls (Shape:)								,	,					
South side only. South side only. South side only.	i (==)					1								
Upstream End Culvert Component Last Now Explanation of Condition Direction Ind Treatment (Concrete, Steel, NONE Others, None) Headwall X X Vingwalls X X (Shape:)						South side only.								
Culvert Component Last Now Explanation of Condition Direction N Image: Condition of Condition o	Approach Road	d / Eml	bankmen	General Rat	ing	7	7							
Culvert Component Last Now Explanation of Condition Direction N Image: Condition of Condition o							Upstre	am End						
Direction N End Treatment (Concrete, Steel, NONE Dithers, None) Headwall X X Collar X X Wingwalls X X (Shape:	Culvert Compo	nent				Last		1		tion				
Others, None) Headwall X X Collar X X Mingwalls (Shape:	Direction					N								
Collar X X Wingwalls X X (Shape:)	End Treatment (Others, None)	(Concre	ete, Steel,	NONE										
Ningwalls X X (Shape:)	Headwall					X	Х							
(Shape:)	Collar					Х	Х							
(Shape:)	Wingwalls					Х	X							
	Cutoff Wall					Х	Х							

			linetre	am End
Culvert Component		Last	Now	Explanation of Condition
Culvert Component Bevel End		Last 6	X	Straight cut, no bevel.
	0	0		Rebar beaver grid.
Heaving (mm)	0			
Invert Above/Below Stream Bed				Large lake U/S of culvert.
Above/Below (mm)	0		Ι	
Scour Protection		7	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 100)				
Scour/Erosion		7	N	
Beavers (Y/N)	Yes			
Upstream End General Rating		6	7	Based on scour from 03May2010.
		Brid	dge Cu	Ivert Barrel
Culvert Component				Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN,			
Barrel Last Accessible Date	06-Feb-2012			
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		N	6	Roof estimated.
Measured Rise (mm)		- 14		Troof Galifiation.
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	30			
		N	N	Could be a 2 condition if greated cooms along sidewell
Sidewall Magazinad Span (mm)	1450	IN	IN	Could be r=3 condition if cracked seams along sidewall. At midspan.
Measured Span (mm)	1450			
Measured At Ring No.	04			1.5%
Deflection (mm)	21			
Percent Deflection	1			
Floor	I.	N	N	Covered in rock/drift/ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	
Separation (mm)	0			
Longitudinal Seams		N	N	(Lower seams nto visible. 17Aug2000).
Total No. of Cracked Rings	2			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	5	(Some pitting on floor. 2000/08/17) - Ice covered.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
r origing (1/14)	INU			

77462 -1 Bridge Culvert

			Bridge Culvert Barrel						
Culvert Component		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm	<u>): 1429</u>	, Rise (mm): 1575, Type: SPE)					
Fish Passage Adequacy		5	5						
Baffle		Х	Х						
(Type:)									
Waterway Adequacy		4	4	U/S opening has beaver grate catching drift.					
Icing (Y/N)	No								
Silting (Y/N)	Yes								
Drift (Y/N)	Yes								
Barrel General Rating		3	3	G.R. carried forward since 17/Aug/2000.					
		D	ownstr	ream End					
Culvert Component		Last	Now	Explanation of Condition					
Direction		S							
End Treatment (Concrete, Steel, Others, None)	STEEL								
Headwall		X	X						
Collar		X	X						
Wingwalls		Х	X						
(Shape:)									
Cutoff Wall		X	X						
Bevel End		5	5	Minor superficial rust. Bent @ SE shoulder, ok.					
Heaving (mm)	0								
Invert Above/Below Stream Bed	ABOVE								
Above/Below (mm)	50								
Scour Protection		6	N	(Rock & natural. 03May2010) - Snow covered.					
(Type : RIP RAP)									
(Avg. Rock Size(mm) : 250)									
Scour/Erosion		6	N						
Beavers (Y/N)	No								
Downstream End General Ratin	ng	5	5						
		s	tructur	re Usage					
		Last	Now	Explanation of Condition					
Channel (U/S and D/S)									
Alignment		5	5	D/S channel bends 40 degree SE 10m from outlet.					
Bank Stability		5	5						
HWM (m below Top of Culvert)				HWM not visible.					
Drift (Y/N)	Yes								
Channel Bottom Degrading/Aggrading		3 3 G.R. carried forward since 17/Aug/2000. Downstream End Last Now Explanation of Condition X X X X X X X X X X X X X S 5 5 Minor superficial rust. Bent @ SE shoulder, ok 6 N (Rock & natural. 03May2010) - Snow covered. 6 N 5 5 Structure Usage Last Now Explanation of Condition 5 5 5 D/S channel bends 40 degree SE 10m from out 5 5 5							
Beavers (Y/N)	Yes								
(Fish Compensation Measure 1 :	NONE)								
(Fish Compensation Measure 2 :	NONE)								
Channel General Rating		5	5						

Alberta Transportation

			Maintenance Recommendations	ecommenda	ations					
Inspector Recommendations	Year		Inspector Comments		Department Comments	ments	-	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	g									
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUTOFF	roff									
REPAIR SEAMS										
OTHER ACTION	2012		Dewater & conduct Lvl 2 inspection.							
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now)	Now) 33.3/33.3	33.3	Sufficiency Rating (Last/Now)		38.1/39.1	Est. Repl. Yr	2020	Maint. Reqd. (Y/N)		Yes
Special It appears that sidewall seams were rated 3 on 17Aug200 Comments for condition not viewed since that time. Next Inspection	ewall seams weed since that tii	ere rated 3 o ne.	on 17Aug2000 or earlier, and that r=3		Department Comments					
Maintenance Reviewed By					Date		Ĕ	Estimated Total	0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Owen Salava	a		Previous A	Previous Assistant's Name					
Next Inspection Date	06-Nov-2013	~		Previous Ir	Previous Inspection Date	03-May-2010	0			
Inspection Cycle (Default) (months)	21									
Comment										

			Maintenance Rec	commend	lations						
Inspector Recommendations		Year	Inspector Comments		Department C	commer	ıts		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS											
PLACE ADDITIONAL RIP RAP											
REMOVE DRIFT ACCUMULATI	ON										
INSTALL CONCRETE/STEEL L	NING										
INSTALL STRUTS											
INSTALL CONCRETE COLLAR	CUTOFF										
REPAIR SEAMS											
OTHER ACTION		2012 Dewater & conduct Lvl 2 inspection.			Defer						
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
Structural Condition Rating (L (%)	ast/Now)	33.3/33	Sufficiency Rating (Last/I	Now)	38.1/39.1	Est	. Repl. Yr	2020	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection It appears that sidewa condition not viewed s		eams were e that time	e rated 3 on 17Aug2000 or earlier, an e.	d that r=3	Department Comments	Curren	tly programm	ned to be	replaced in 201	9.	
Maintenance Reviewed By An		w Smikle	s		Date	31-Oct	-2012		Estimated Tota	1 0	
Proposed Long-Term Strategy	7 11 13 10				7.50.0	, o. o.					
On 3-Year Program (Y/N)											
Proposed Action											
Previous Inspector's Name O		Salava		Previous	Assistant's Nan						
Next Inspection Date	06-No	v-2013		Previous	s Inspection Date 03-May-2010						
Inspection Cycle (Default) (mont	hs) 21										
Comment											